

REMARKS

Claims 1-14 are pending in this application. Claim 1 is an independent claim. Claims 2-14 are dependent claims. Claims 1-14 have been rejected.

Amendments to claims 2, 5, and 6 are presented herein to improve form without changing substance. Claims 15-22 are newly added in this response. The title has been amended. No new matter is being presented, and approval and entry are respectfully requested.

Objection To The Title

In item 1 on page 2 of the Office Action, the Examiner objected to the title as not being descriptive. Applicants request that the title be changed as set forth above. Accordingly, Applicants request withdrawal of the objection to the title.

Rejections Under 35 U.S.C. § 103(a)

In item 3 on pages 2-4 of the Office Action, the Examiner rejected claims 1, 3-5, 9, and 10 under 35 U.S.C. § 103(a) as being unpatentable over Matsuda (U.S. Patent No. 6,211,649) in view of Selin et al. (U.S. Patent No. 5,903,849).

In item 4 on pages 4 and 5 of the Office Action, the Examiner rejected dependent claims 2 and 11-14 under 35 U.S.C. § 103(a) as being unpatentable over Matsuda in view of Selin and further in view of Hamdi et al. (U.S. Patent No. 6,408,351).

Also, in item 5 on pages 5 and 6 of the Office Action, the Examiner rejected dependent claims 6-8 under 35 U.S.C. § 103(a) as being unpatentable over Matsuda in view of Selin and further in view of Freadman (U.S. Patent No. 6,546,262).

Applicants respectfully traverse these rejections for the reasons presented below.

Claim 1 recites a communication device having "...disconnecting means for disconnecting a line which is being used for a communication when the signal peculiar to the USB is not detected by said detecting means within a predetermined time."

Referring to the embodiment of the invention shown in Fig. 1 of the present application, the present invention controls disconnection of a communication line (i.e., data line 5-1, command line 5-2, and control line 5-3) when an abnormality is detected in computer equipment (i.e., the host 2) that is coupled to a communication device 1. The host 2 sends, for example, an interrupt transfer request signal (i.e., a signal peculiar to the USB 4) to the communication device 1 via the USB 4. When the detected time interval of the interrupt transfer request signal is longer than the predetermined detection time interval, the communication device 1 determines that the operation of the host 2 is abnormal and disconnects the communication line connecting the wireless telephone 3.

The Matsuda reference relates to a USB cable used to charge a battery of an external apparatus connected to a personal computer via the USB cable (Matsuda at col. 1, lines 7-13). Matsuda does not disclose disconnecting a communication line when a signal peculiar to the USB is not detected by the detecting means within a predetermined time, as specified in claim 1. The Examiner has relied on the Selin reference as disclosing these features at column 9, lines 26-30.

The Selin reference relates to an adapter for data transmission between a data terminal and a radio telephone (Selin at col. 1, lines 8-10). However, column 9, lines 26-30 of Selin merely disclose a disconnection that is made from the radio telephone side and not from the adaptor side. Thus, it is the position of the Applicants that neither Matsuda nor Selin teaches "disconnecting a line which is being used for a communication when the signal peculiar to the USB is not detected by said detecting means within a predetermined time," as recited in claim 1.

The Hamdi reference relates to a peripheral coder/decoder (codec) that has low power consumption such that the peripheral codec facilitates bus-powered peripheral devices that use a codec (Hamdi at abstract). The Examiner relied on Hamdi as disclosing that a USB supports various types of data transfers. Hamdi does not disclose "disconnecting a line which is being used for a communication when the signal peculiar to the USB is not detected by said detecting means within a predetermined time," as recited in claim 1.

The Freadman reference relates to a communications device for interfacing a computer to a cellular telephone (Freadman at abstract). The Examiner relied on Freadman as disclosing that when a cellular phone is re-attached to a cradle, a list is uploaded to a cellular phone for display. Freadman does not disclose "disconnecting a line which is being used for a

communication when the signal peculiar to the USB is not detected by said detecting means within a predetermined time,” as recited in claim 1.

The dependent claims depend directly or indirectly from claim 1 and are patentable over the prior art for at least the reasons discussed above.

Therefore, Applicants submit that claims 1-14 patentably distinguish over the prior art. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under § 103.

New Claims

Claims 15-22 are newly added with this response to alternatively define the present invention.

Claims 15-20 are variations of claims 1, 2, 5, 7, 9, and 10, respectively.

Claim 21 recites a communication controller having “... a computer device connected to the communication device via a universal serial bus (USB), the computer device sending a communication request signal to the communication device via the USB; and a wireless telephone connected to the communication device via a communication line, the communication device disconnecting the communication line when a USB signal is not detected by the communication device within a predetermined amount of time.” These features are not taught or suggested by the cited references.

Claim 22 recites a communication device having “...an interrupt detector detecting a USB signal as a result of a communication request signal from the computer device, and determining whether the USB signal is received within a predetermined detection time; and a line controller disconnecting the communication line when the USB signal is not received within the predetermined detection time.” These features are not taught or suggested by the cited references.

Thus, for at least the reasons presented above, Applicants submit claims 15-22 patentably distinguish over the prior art. Accordingly, Applicants respectfully request allowance of the new claims.

Conclusion

It is submitted that none of the references, either taken alone or in combination, teaches the present claimed invention. Thus, claims 1-22 are deemed to be in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Finally, if there are any additional fees associated with filing of this response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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